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MOUNT VESUVIUS.

THE ancients were so impressed with the volcanic character of the shores of the Bay of Naples, that they called them *Phlegrei Campi*, or Burnt Fields. Here they placed the mouth of hell (Lake Avernus), which Strabo says 'is a deep hollow with a narrow entrance in size and shape, well suited for a harbour, but incapacitated for that purpose by the shallow Lucrine lake which lies before it. It is inclosed by steep ridges, which overhang it everywhere, except at the entrance, now highly cultivated, but formerly inclosed by a savage, trackless forest of large trees, which threw a superstitious gloom over the hollow. The inhabitants further fabled that the birds which flew over it fell down into the water, destroyed by the rising exhalations, as in other places of this sort, which the Greeks call *Plutonia*, or places sacred to Pluto; and imagined that Avernus was a Plutonium, and the abode where the Cimmerians were said to dwell.' Antiquaries like Martovelli and Mazzocchi see in the names of places around references to fire derived from Phœnician roots. Vesuvius, according to them, comes from Syriac, *Vo Seveer*, 'the place of flame;' *Herculaneum*, *Horoh Kalie*, 'pregnant with fire;' and Pompeii, *Pum Peeah*, 'the mouth of a burning furnace.' However that may be, Diodorus Siculus points out the probable activity of Vesuvius in ancient times; Strabo says it was probably 'a volcano, formerly with burning craters, now extinguished for want of fuel;' and Vitruvius mentions a tradition that flames had issued from it.

The first recorded eruption of Vesuvius occurred during the reign of Titus, 79 A.D., when Herculaneum and Pompeii were destroyed; but it appears that sixteen years before that, a severe earthquake took place, traces of which, in cracked walls and pavements, may still be seen in the excavated houses of both cities. This eruption caused the death of the Elder Pliny; and we fortunately have two letters from his nephew to Tacitus which record the phenomena very fully. He says 'his uncle was 'at that time with the fleet under his

command at Misenum. On the 24th of August, about one in the afternoon, my mother desired him to observe a cloud which appeared of very unusual size and shape. He had just returned from taking the benefit of the sun, and after bathing himself in cold water, and taking a slight repast, had retired to his study. He immediately arose, and went out upon an eminence, from whence he might more distinctly view this very uncommon appearance. It was not at that distance discernible from what mountain this cloud issued, but it was found afterwards to ascend from Mount Vesuvius. I cannot give a more exact description of its figure than by resembling it to that of a pine-tree, for it shot up to a great height in the form of a trunk, which extended itself at the top into a sort of branches. . . . It appeared sometimes bright and sometimes dark, and spotted, as it was more or less impregnated with earth and cinders. This extraordinary phenomenon excited my uncle's philosophical curiosity to take a nearer view of it. He ordered a light vessel to be got ready, and gave me the liberty, if I thought proper, to attend him. I rather chose to continue my studies; for, as it happened, he had given me an employment of that kind. As he was coming out of the house, he received a note from Rectina, the wife of Bassus, who was in the utmost alarm at the imminent danger which threatened her; for her villa being situated at the foot of Mount Vesuvius, there was no way of escape but by sea; she earnestly entreated him, therefore, to come to her assistance. He accordingly changed his first design, and what he began with a philosophical, he pursued with an heroic turn of mind.'

After assisting Rectina, though cinders and pumice-stones fell into the ships, he went on to succour his friend Pomponianus, then at Stabiae (Castellamare). He seems to have been little discomposed, and actually retired to rest there. He was soon called up by the intelligence that the showers of stones and ashes would soon bury the house. The company agreed to go to the shore; it was pitch-dark, though it was day everywhere else. 'There my uncle, having drunk a draught or two of cold water, threw himself upon a cloth

which was spread for him, when immediately the flames, and a strong smell of sulphur, which was the forerunner of them, dispersed the rest of the company, and obliged him to rise. He raised himself up with the assistance of two of his servants, and instantly fell down dead—suffocated, as I conjecture, by some gross and noxious vapour, having always had weak lungs, and being frequently subject to a difficulty of breathing.*

The second letter contains an account of the doings of the nephew and his mother at the same time at Misenum. Having passed a dreadful night, they determined to leave the house; and 'being got at a convenient distance from the houses, we stood still, in the midst of a most dangerous and dreadful scene. The chariots we had ordered to be drawn out were so agitated backwards and forwards, though upon the most level ground, that we could not keep them steady, even by supporting them with large stones. The sea seemed to roll back upon itself, and to be driven from its banks by the convulsive motion of the earth; it is certain, at least, the shore was considerably enlarged, and several sea-animals were left upon it. On the other side, a black and dreadful cloud, bursting with an igneous serpentine vapour, darted out a long train of fire, resembling flashes of lightning, but much longer.' Further on, he tells us: 'Nothing then was to be heard but the shrieks of women, the screams of children, and the cries of men; some calling for their children, others for their parents, others for their husbands, and only distinguishing each other by their voices; one lamenting his own fate, another that of his family; some wishing to die from the very fear of dying; some lifting their hands to the gods; but the greater part imagining that the last and eternal night was come which was to destroy the gods and the world together.'*

We have given these lengthy extracts from Pliny's letters, as they bring vividly before the mind's eye the terrors of the first eruption. Herculaneum was overwhelmed with volcanic mud, not lava, to the depth of from seventy to one hundred feet. The few skeletons found during the excavations shew that the inhabitants had time to escape, and the same fact accounts for the few works in the precious metals discovered. Up to the eighteenth century, the city was supposed to be buried under Torre del Greco; but in 1709, its real site was discovered, though that fact was not known for some years after. Even in 1740, Sir Hans Sloane, in describing the excavations to the Royal Society, said it was believed the city was called 'Aretina in the time of the Romans, and by others Port Hercules, where the Romans usually embarked for Africa.' The lava seen at Herculaneum was emitted by subsequent eruptions. Pompeii was buried to the depth of twenty or twenty-two feet with pumice-stones and ashes, and excavations have therefore been comparatively easy. Some have thought that the ashes fell in a burning state, and so carbonised the woodwork, &c.; but Overbeck, in his *Pompeii*, thinks they would not have set fire to anything, and thinks the carbonisation is due to the fact of

the wood having been buried so long.* Pompeii was discovered about ten years after Herculaneum. Up to 1861, only about two-fifths of the city had been uncovered; and, at that rate, very many years would have been required to excavate the whole. The king of Italy, however, has increased the annual amount granted; and it is calculated that the remains within the walls will be laid bare in about twenty years.

The second eruption of Vesuvius occurred in 203, and subsequent ones took place in 472, 512, 685, 993, and 1036. This last is usually spoken of as the first which produced lava, but Procopius distinctly describes lava as a product of the 512 eruption. In the middle ages, the superstition of the mouth of hell being in this region was revived, though changed from Avernus to Vesuvius. From the eruption in 1139 (when the stream of lava lasted eight days) to 1306, the mountain was dormant, and from the latter date to 1631, a period of three hundred and twenty-five years, with the exception of a slight eruption in 1500. Bracini visited the mountain before that of 1631, and says: 'The crater was five miles in circumference, and about six thousand paces deep; its sides were covered with brushwood, and at the bottom there was a plain on which cattle grazed. In the woody parts, boats frequently harboured. In the midst of the plain, within the crater, was a narrow passage, through which, by a winding path, you could descend about a mile among rocks and stones till you came to another more spacious plain covered with ashes. In this plain were three little pools, placed in a triangular form—one towards the east, of hot water, corrosive and bitter beyond measure; another towards the west, of water salter than the sea; the third of hot water, that had no particular taste.' Commenting upon this, Dr Dyer says, judging from the size of the crater, one would suppose he meant its boundary to be the ridge of Somma. The modern cone probably did not then exist.

The eruption in December 1631 was one of great importance. One of the seven streams of lava which then issued from the mountain destroyed two-thirds of Torre del Greco, and eighteen thousand persons are said to have perished from this eruption. Many of these were killed by the scalding water which fell in the form of rain. Other seventeenth century eruptions occurred in 1660, 1682, 1694, 1696, and 1698. In the eighteenth we have them recorded in 1701, 1707, 1712, 1717, 1720, 1728, 1730, 1737, 1751, 1754, 1758, 1766, 1767, 1770, 1776, 1779, 1784, 1787, and 1793-4. Of these the most important were those of 1779 and 1793. That of 1779 has been well described by Sir W. Hamilton in his *Campi Phlegrei*. On August 8, he says: 'At about nine o'clock there was a loud report, which shook the houses at Portici and its neighbourhood to such a degree as to alarm the inhabitants and drive them out into the streets; and, as I have since seen, many windows were broken, and walls cracked by the concussion of the air from that explosion, though faintly heard at Naples. In an instant, a fountain of liquid transparent fire began to rise, and, gradually increasing,

* It is a matter of doubt whether the mass of ashes, &c. which covers Pompeii was discharged from Vesuvius, or whether they are not the debris of ancient eruptions washed into the city by the rains which accompanied the 79 A.D. eruption. This latter opinion is held by Von Buch and Dufrenoy.

* Quoted in Dyer's *Pompeii*, 36-44.

arrived at so amazing a height as to strike every one who beheld it with the most awful astonishment. I shall scarcely be credited, when I assert that, to the best of my judgment, the height could not be less than three times that of Vesuvius itself, which rises three thousand seven hundred feet perpendicular above the level of the sea. Puffs of smoke, as black as can possibly be imagined, succeeded one another hastily, and accompanied the red, transparent, and liquid lava, intercepting its splendid brightness here and there by patches of the darkest hue. Within these puffs of smoke, at the very moment of their emission from the crater, I could perceive a bright but pale electrical fire, briskly playing about in zigzag lines.*

Of the important eruption of 1793, Dr Clarke, who was then at Naples, has left a detailed account. We can only find space for one extract, describing the state in which the lava leaves the mountain. Dr Clarke tried to reach the source by walking along the edge of the stream of lava, but a wind carried the smoke from the mountain into his face, and he then tried a scheme recommended by Sir W. Hamilton—that is, crossing the lava itself, and did so only burning his boots a little. After walking about half an hour, he came to the place whence the lava issued, and says: 'All I had seen of volcanic phenomena before did not lead me to expect such a spectacle as I then beheld. I had seen the vast rivers of lava that descended into the plains below, and carried ruin and devastation with them; but they resembled a vast heap of cinders, or the scorie of an iron foundry, rolling slowly along, and falling with a rattling noise over one another. Here a vast arched chasm presented itself in the side of the mountain, from which rushed, with the velocity of a flood, the clear vivid torrent of lava, in perfect fusion, and totally unconnected with any other matter that was not in a state of complete solution, unattended with any scorie on its surface, or gross materials of an insolvent nature, but flowing with the translucency of honey, in regular channels, cut finer than art can imitate, and glowing with all the splendour of the sun.' This was the most important eruption since 79 and 1631. The lava having threatened Resina, altered its direction towards Torre del Greco, over the current of 1631. It passed through the centre of the town, and enveloped the principal churches and houses in a stream varying from twelve to forty feet in thickness, advancing three hundred and eighty feet into the sea. The current was six hours doing the four miles to the sea, flowing quicker than usual. Some of the ashes from this eruption fell in Calabria, one hundred and forty miles distant.*

Early in this century, eruptions occurred in 1804, 1805, 1809, 1812, 1813, 1817, 1820, and 1822. The last greatly changed the form of the cone, more than eighteen hundred feet of which was carried away, reducing the height of the mountain from four thousand two hundred to three thousand four hundred feet. Some of the following eruptions, 1823, 1831, 1834, 1838, 1845, 1847, 1850, 1854, 1855, 1861, and 1868, added to the eruptive cone, and brought up its height in 1868 to four thousand two hundred and fifty-three feet. One of the streams of lava in the 1850 eruption enveloped Bosco Reale. This wood contained fine

oak and ilex trees, and these, when surrounded with lava, poured out jets of steam from every knot and branch, and then exploded with a loud noise. Dr Dyer visited Torre del Greco a month or two after the 1861 eruption, and found some of the wells there still boiling. He says that ashes were on that occasion ejected from some small cones less than half a mile from the town.

The recent eruption commenced on Tuesday, April 23. The usual grand effects were witnessed with safety by thousands of persons during the next two days. Many people remained on the mountain the whole of Thursday night, and a considerable number were assembled near the Observatory, on the lava-bed of 1859, looking at the molten lava flowing into the Atrio del Cavallo. This is the valley between Vesuvius proper and Monte Somma, and is so called because persons making the ascent leave their horses there. About 2.30 A.M. on Friday morning these persons were horrified to see cracks opening under their feet, discharging volumes of sulphurous vapour. Twelve persons died on the spot, and many more were severely injured. Amid terrific noise it was observed that a new and terrible feature had been added to the eruption. A new mouth or crater had opened in the Atrio del Cavallo, and a lava-stream poured down in the direction of San Sebastiano and Massa di Somma. As far as we can understand from a careful examination of the reports, the stream divided into two, one going to San Sebastiano and Massa, the other rushing down the Novelle of Resina, skirting St Ivrio, St Giorgio, and Cremano, sparing the pretty villas there, and flowing on towards Barra. Another stream divided and came down towards Torre del Greco and Torre dell' Annunziata. All this time, the great cone was discharging vast quantities of stones and ashes, destroying the vegetation for a considerable distance on all sides. Perhaps no part of Italy is more thickly populated than the country round Vesuvius, and as the inhabitants of the towns and villages could not feel safe for an instant, forty thousand or fifty thousand persons must have left their homes in terror. We take the following extract from the graphic account of a correspondent of the *Times*, dated Naples, May 1, as it well shews the general feeling during the days succeeding the grand eruption. 'The grandeur and brilliancy of the spectacle, however, created a certain insensibility to the danger and the immense disasters which were being inflicted. Not so was it when the phase changed, when dazzling light was succeeded by the blackest of darkness; when the air was filled with fine dust, which we gulped down as we almost stumbled along on our road; when this usually bright and joyous city was transformed into another London in a thick November fog, and when the awful muttered thunder of the mountain made our houses, ay, and ourselves—let the truth be spoken—tremble too. In two days, one hundred persons fled from the hotel in which I am lodging, and I am not astonished at it. A lion might have been in the corner of each room, roaring with his utmost force, and this comparison gives but a faint idea of the violence and continuity of that terrible sound. At times, the thunder seemed to approach nearer, and the windows and doors shook as if the mysterious enemy who threatened our destruction was about to enter, and give us the *coup de grâce*.

* Murray's *South Italy and Naples*, 208, 209.

Were I to live a century, I should never forget the horrors of Sunday night and the whole of Monday (28th and 29th). There was nothing palpable, nothing tangible, nothing that could be resisted. There was a mysterious power underneath our feet, around our walls, in the whole atmosphere about us, before which we could only bow and tremble; and devoutly grateful was I when the roar of the thunder died away in muttering sounds, and left us in peace yesterday morning.

In some parts of Naples, the ashes were a foot thick. They were in the form of a soft gray powder. Professor Puzzo says they contain sulphuric acid, which, if wetted, might yield injurious exhalations, so that the watering of the streets was discontinued.

A WOMAN'S VENGEANCE.

CHAPTER VIII.—A RIVER LEGEND.

ONE more wooded reach, through which the sun, now low in the unclouded heavens, rained gold, and then the river inn came full in sight. It was a picturesque building, standing in a garden, and without hedge or boundary of any kind save the stream itself, down to which it sloped. On the lawn were two ladies looking eagerly towards the approaching galley, and waving their pocket-handkerchiefs in sign of welcome. At the landing-place was a cart, with servants.

'Is that the cart for the luggage, Arthur?' inquired Mrs Somers, still fidgety respecting her goods and chattels; 'why, it can surely never take all our things.'

'Your aunt and Miss Blanche are waving their handkerchiefs to us,' remarked Helen at the same moment. 'Why don't you take off your hat, Arthur!'

But Arthur heard them not. There was a fascination for him in the place before him, of which they did not dream, and it held all his thoughts in thrall. He was still young in years; but travel and peril, and a wild and rough career, had made him something wholly different from the boy who had bidden adieu to that fair scene five years ago. A score of times he had leaped ashore where yonder skiff was moored, and in the summer twilight hurried across the noiseless grass to greet his love; a score of times at that latticed window looking to the south, he had seen her face on the watch for him. By that red beech, under the harvest moon, he had parted from her, with vows of eternal fidelity—at least on one side. Suppose, in spite of what he had heard from the boatman, she should be at the *Welcome* still! Yet, if so, her father, plump and portly, would be standing at the inn door; he always came that far to welcome the county folks; but as for the ordinary water wayfarers—the bare-legged jersey-coated tenants of eight-oars and four-oars; the arrival of a whole argosy of such would never have drawn him from his snug parlour behind the bar. Once, years and years ago, to meet Squire Percival, who had carried the county in the Whig interest, Jacob Renn had been known to come down to the landing-place; but a great political principle had been involved in that movement, and it had never occurred again. Still, Jenny might be there. The garden, that was her pride, looked, indeed, not quite so well cared for as of old; but the old house was aglow with

flowering creepers still, and what if, at her chamber window yonder, the purple blossoms of the wisteria should be pushed aside by a white hand he knew, and a face should shine forth, 'looking ancient kindness' on his pain and falsehood! The soft shock of the barge as it skimmed the shore awoke him from these reflections, and he hastened forward to do the honours to his new guests. They were to be passengers on board the *Lotus* for the short remainder of its voyage—a mile or so of the most beautiful portion of the river; then, dropping through Swansdale Lock, they would emerge, not in view of the Hall, indeed, but quite close to it, and glide along its garden-grounds to the landing-steps. The ladies were already acquainted with one another. 'What a charming day you have had for your expedition!' 'O yes, it has been most delightful. How I wish you had been with us.' &c. &c. Mr Wynn Allardyce alone had to be introduced.

'My dear Arthur,' whispered Mrs Tyndall, 'do, pray, take some notice of the new landlord of the *Welcome*; it is not old Jacob, you know, as it was in your time. He has been bowing and scraping for these five minutes.'

'The new landlord! How very remiss of me!' If Tyndall's acknowledgments were tardy, the good man of the house had certainly no cause to find fault with their cordiality.

'What a lovely boat! what a beautiful cabin, Arthur!' cried Blanche enthusiastically. 'It is like a boudoir.'

'Yes, and these are not all its beauties, cousin. We have a picture in panel here, painted by Bargee, after Rembrandt.'

He drew back the wooden partition that divided the apartment from the steerage, and disclosed the griny features of Mr Paul Jones, who had hoped to pass unobserved. This was rude in Tyndall, and, as he had his own reasons for knowing, highly imprudent; but he was once more in 'tearing spirits,' and scarcely cared what he did. In vain Blanche courtesied to 'the Pirate' with all due solemnity; her fair face was purple with suppressed mirth, and when the laughter of the rest broke forth, she could no longer restrain it. Even Allardyce roared. Adair alone did but smile; perhaps he felt how dangerous it was for his friend to anger this man. The humour of the scene entirely did away with that stiffness which always follows the introduction of new elements into a social gathering. But for it, Mrs Somers would without doubt have put on her 'company manners,' which did not become the good old soul, and Helen would have been feverishly polite; as it was, with a rustle of silk and a 'Plenty of room here, Mrs Tyndall,' the mer lady welcomed her contemporary, while their olive branches forgathered in less formal fashion.

The new-comers were of the same type as those they met; that is to say, they were dowager and daughter, plump and fair, well-dressed and well-looking, but personally they were very different people. Mrs Ralph Tyndall was said to have the best manners of any lady of her age in Belgravia; we do not say 'of her rank,' because, unhappily, manners culminate at a certain comparatively low point in the social scale, and by no means improve with elevation. Her voice was low and gentle, but perfectly distinct. She talked with ease, but avoided subjects with which she

was unacquainted. Her face, in place of the stereotyped smile of fashion, wore an about-to-be-pleased look, which charmed and encouraged the beholder. When she was displeased, the offender said to himself, not, 'How particular this old woman is!' but, 'What a fool I have made of myself; or (if a rogue), 'I am afraid I have shewn my hand.' But such occasions were rare. She was the idol of young men, to whom she was very plain-spoken in her sweet way, but intensely charitable. The worst things she said of any one were courteously couched, and always spoken to their faces. She had her enemies (as such women always will have, so long as there are jades and scoundrels in the world), but they were at a loss for a bad name for her, and obliged to confine themselves to telling one another that her husband used to beat her, and had died of *delirium tremens*. The latter statement was a fact. She had suffered much as a wife—patiently, heroically—yet wept honest tears over her poor sottish husband's grave. Fair as she had been as a bride, she was scarce less attractive now even as to mere beauty, while a life of kindly deeds and honest thoughts had left upon her face such a serene reflection that any saint might have exclaimed: 'Here's the wife for my money!' (or whatever expression seems a saintly equivalent). 'I may have steeled my heart against a woman, but this is an angel!' And yet she was dressed in purple and fine linen, edged with real lace, and lived in Eaton Square.

Miss Blanche, as a step-daughter, would have astonished the saint. She doted on croquet, and when at a ball, had a preference for round dances; but she was an honest-hearted English girl for all that, and a gentlewoman from the crown of her Dolly Varden hat to the sole of her high-heeled Balmorals. Of course, she had never been one of a shipwrecked party of three-and-thirty 'waiting' for a sick boy, but in such experiences of life as had fallen to her share, she had been always fully equal to the occasion. She was always perfectly at ease, whether in the company of princes (she had danced with one once at a garden-party, and had had the courage to confess she thought him dull) or of the peasants about what had once been her Berkshire home, for she entertained the rare idea that they were equally her fellow-creatures. For the rest, she sang a little, painted a little (though not on velvet, so her cheeks were safe), read a little (novels, mostly, Heaven bless her!), and had a sharp tongue for a rival. She had an eye, too, for the picturesque, and pointed out with enthusiasm to Helen various points of beauty on their way.

'How good of you,' said Helen, not quite knowing what to say, but bent upon being friendly, 'since all these things must be so familiar to you as almost to be wearisome.'

'O no,' replied Blanche gravely. 'The more I see of the river, the more I love it. It has always new charms, as you will find. How I shall envy you when you come to Swansdale for good!'

'Of course she will,' laughed Arthur. 'She will envy you me, my dear.'

At this Blanche beat him with her parasol; and Helen looked on well pleased. If there really had been anything between the cousins in old times, thought she, it was certainly all over now, or he would not have ventured on such a pleasantry.

'We are now coming to my favourite "bit," said

Blanche, 'and what used to be Arthur's too; before his outlandish experiences put him out of conceit with dear old Father Thames. He denies that, of course; but how a man can possess a place like Swansdale, and not visit it for months after he comes to England, is to me incredible.'

'I kept that pleasure,' explained Arthur gravely, 'until the time (which has now arrived) when it should be doubled by being shared by the loveliest of her sex.'

It was now Helen's turn to administer chastisement. 'What a naughty story-teller your cousin is!' she said. 'Hush! What is that?'

'That is the thunder of our Niagara, the lasher,' said Blanche. 'All day long you will hear its dreamy music at the Hall, and when at night you would fain sleep, you have only to picture its tumbling depths of foam to insure it. That great chalk cliff opposite is haunted.'

'Haunted!'

'Certainly. There used to be a ferry-house yonder, but it has been done away with on account of the ghost. Nobody could be got to put people across after nightfall.'

'Oh, pray tell us the story, Blanche.'

'I am so frightened,' whispered that rogue Tyndall; 'might I get a little nearer to you, Helen?'

There was not the least occasion for him to do that, but she did not forbid it.

'Well, once upon a time, long, long ago, there was a lock-keeper at Swansdale who had a very charming daughter. Her name was Janet, and she was the toast of the river.'

'They called her "the Fair One of the Golden Locks,"' interpolated Tyndall.

'Be quiet, sir. Well, her pretty head got turned by the attentions of the gentlemen-boatmen, and instead of wedding the young ferryman to whom she was engaged, and in whose company she would doubtless have crossed safely the river of Life, she married above her station. She had no one to blame but herself, for even her father disapproved of the gentleman she had chosen—a wild extravagant young man, belonging, if I remember right, to some regiment quartered at Windsor: but she would have him, and paid a sad penalty for it. He ill-treated her, and she ran away from him.'

'With somebody else,' observed Arthur, by way of chorus.

'I am afraid she did,' continued Blanche; 'but, at all events, what her poor father heard of her was so bad, that it was almost a relief to him when he heard nothing at all, and began to conclude that she was dead. Just before dawn on a certain summer morning, he was aroused by that cry of "Lock, Lock, Lock!" which you have heard so many times to-day; but musical and melancholy as it always is, there was something in its tones that sounded to the old man's ear much more pathetic and plaintive than usual. It was a woman's voice, too, which it was rare to hear, and especially at such an hour. He rose and dressed himself, and came out upon the little bridge. The day was breaking, and the mist lay on the river, so that he couldn't see up-stream; but the low sweet call came nearer and nearer, and he began to open gates. There was no sound of oars, however, nor beat of hoof; nothing save that pitiful cry and the roar of the lasher, which he was too familiar with to hear, broke the silence of the dawn. Presently, the cry was repeated, apparently at his very feet,

and out of the silver mist floated into the lock itself his lost daughter, Janet! Dead, drowned, with her golden hair floating about her like river-weed, and her hands clasped over her heart, she had come home at last.

'Poor soul!' sighed Helen. 'Did it not break her father's heart?'

'Yes. He took that ghostly call for a summons to the tomb, and died; and what was worse, the poor ferryman, her lover, was summoned also; for every succeeding night there was a cry of "Ferry!" "Ferry!" "Ferry!" "Fer!" "Fer!" "Fer!" "Ferry!" coming through the mist, and echoing with pitiful importunity from the chalk-pit—and the voice was a woman's voice that he well knew. He never dared to answer that appeal, and when real people, passengers of flesh and blood, demanded his services at night, he would not give them. And so the ferry was done away with.'

'Really! For that very reason?' inquired Helen.

'Yes, my dear,' said Arthur: 'the story was said to have been invented by the clerk of the Thames Commissioners for an excuse to reduce their staff.'

'You know it's true, Arthur,' insisted Blanche; 'and also that the chalk cliff is haunted by all three of them.'

'Yes; they play dummy-whist together,' asserted the Incurable. 'In the early summer mornings, you may hear them calling for trumps, and crying "Treble, treble, tre—tre—tre—tre—treble, and the rub."'

'You may laugh as you please, cousin; but all I know is, that the call only ceased when the poor ferryman died.'

'And when the ferry was abolished, you should have added,' said Tyndall. 'Singularly enough, the cry of "Lock!" is still occasionally heard.'

As though to corroborate this statement, the tremulous call, 'Lock, lock, lock!' was raised by the horseman at this moment, and repeated in plaintive tones by the chalk-pit; and the great gates were seen closed before them, as though the river had found its end. On the right hand, however, some portion of it made its way over the lasher, above whose roaring depths the feathery spray hung like a cloud. The trees, save for the towing-path, came down on each side to the water's edge; and between the lasher and the lock was a green island with the trim cottage of the gate-keeper, standing in a blaze of flowers.

'How charming, how exquisite!' exclaimed Helen.

'Dear heart, how pretty!' cried Mrs Somers.

'I knew you would admire it,' said Blanche proudly; 'it is the gem of the Thames.'

The ladies all emerged from the cabin the better to behold this beautiful scene. Since the arrival of the new-comers, Adair had been making himself agreeable to the two elder ladies. If his ears had listened greedily to Blanche's voice as it narrated the river-legend, his eyes had not wandered towards her, but had fixed themselves ever and anon with a pained anxious glance on his unconscious friend. Now that the opportunity offered, he drew quite close to Arthur, and, while affecting to be admiring nature with the rest, addressed him thus in a low tone: 'Be careful, Tyndall. You will see an old friend at the lock—the people at the *Welcome* told me'—

'Great Heaven! you don't mean'—

'Hush! yes.'

No name was spoken, but Arthur read on his friend's finger-guarded lips, two words: '*It's Jenny.*'

CHAPTER IX.—HOME.

SLOWLY and sullenly the great gates parted before them, and the *Lotus* glided into the lock. It was not a short-handed establishment, as many had been through which they had passed that day, and where the help of their own crew had been gladly accepted, for two men worked the winches, while another looked on with a pipe in his mouth. This on-looker was a stout old fellow in decent black, whose duties seemed to be confined to fishing for sixpences with a little landing-net at the end of a long pole, and to seeing that nobody trod upon the flower-plots that adorned the sloping lawn. Even the grass itself he would have kept sacred if he could.

'Keep to the stone, gentlemen, if you please,' exclaimed he, as Adair and Allardyce jumped out, according to their custom, to stretch their legs; while the barge sunk to the required level. 'The sward is slippery, and an accident soon happens.—Why, bless my soul, Mr Adair, how are you? Surprised to see old Jacob here, I daresay? The fact is, though I gave up the inn, I found I couldn't live away from the old place, so I bought out the lock-keeper, and here I am, with all the work done for me. That suits me to a nicety. You know young Mr Tyndall is coming back to-day, I suppose?—What! you've got him there!—Why, Master Arthur, how do you do?'

Tyndall had come out of the cabin, reluctantly enough, to receive the old man's hearty salutation, and not without difficulty reached the shore, for the boat was sinking rapidly. It was some comfort to him to reflect that in another moment or two he would be concealed from the observation of its tenants.

'The idea of your trying to slip by without saying "How d'ye do?" to old friends! Lawk-amerce, how brown and hearty you do look! Jenny, Jenny!'

As he raised his voice, calling to some one in the house, Arthur cast a hasty glance towards the barge, but it was already out of sight.

'Here's Mr Arthur, Jenny; come out and greet him, wench! Lor bless us, it don't seem but yesterday when you left us! I remember your coming down the last night to the *Welcome*, and I opened a bottle of champagne—ah, that I did—to drink you luck. And you've had luck too, if all I've heard is true. Got a pretty wife, hasn't ye, with plenty of money?—Here, Jenny, lass, here's Mr Arthur; come and bid him joy!'

The name of Jacob Renn's daughter was in reality Alice, but she was always called Jenny Wren—chiefly, doubtless, from the temptation of the pun, but also from a certain bird-like brightness and vivacity that distinguished her. Bright as a bird she was, with cheeks as brown as the berry it feeds on, yet without touch of coarseness. On the contrary, except in the eyes of those who deem Nature herself vulgar, her appearance was essentially refined. Her rich brown hair was so long and plentiful, that, so far from needing dead women's locks, or a horse-tail, to plump it out, she had much ado to stow it away in a queenly crown. She was tall, but of an exquisite figure,

and though simply dressed in very sober colours, looked every inch a lady. And yet it was neither her beauty nor her grace that struck the observant eye, so much as the extraordinary intelligence of her expression. Her face did not need a smile to win you; her brow and eyes attracted you at once. To be sure, on most occasions, her eyes did duty for her lips in the way of smiles; but they did not do so now. They were very grave and steady, though not sad, as she stood at the cottage-door with outstretched hand to greet Arthur Tyndall.

'Why, Jenny, how you are grown!' said he. Though the rest were out of earshot, thanks to the roar of the lasher, his tone was studiously careless, but there was a tremor in it which all his efforts could not conceal.

'Yes,' answered she significantly; 'grown out of all knowledge.'

'O Jenny, spare me!' answered he, in low earnest tones; 'you don't know all.'

He would have retained her hand, but she withdrew it from his passionate grasp.

'Why should I know?' said she quietly. 'I have neither the right nor the desire to do so.'

She had drawn herself up to her full height; but her eyes spoke neither haughtiness nor reproach, only quiet decision.

'If you have not the desire, Jenny, you must think me in your heart a scoundrel.'

The colour mounted to her glorious forehead; but she shook her head.

'Give me ten minutes,' he went on, 'only ten minutes—alone'—

'Not five, not one,' she answered. 'It would be both wrong and cruel.'

'That is what you said, when, in your unselfish generosity, you forbade me to write to you; and see what has come of that!' replied he bitterly.

The warm blood left her cheeks even more quickly than it had come; her whole frame trembled, and she put out one hand, and grasped the pole of the verandah. He saw her weakness, and would have given the world to have rushed forward and placed his arm around her, but he dared not.

'For what is past, I do not blame myself, nor you—Mr Tyndall,' answered she faintly. 'But I should blame myself, indeed, if I suffered you to renew—I mean, if I assumed a right to ask for an explanation of your conduct, or permitted you to give one. Your friends are waiting for you yonder.'

'To-morrow and every other day,' gasped Arthur desperately, 'at the same hour and place as—Jenny, Jenny!' But, with a gesture of annoyance and disdain, the girl had withdrawn into the cottage, whither he felt it would be madness to follow her. The barge was full in sight, waiting for him by the shore beneath the lock, and all eyes might be upon him. One pair of eyes, which he had not bargained for, was watching him with great intentness, the owner whereof stood on the little bridge across which he needs must go to gain the boat.

'Why, Glyddon,' cried Tyndall, as he turned and recognised this personage, who had a fishing-rod in his hand, 'did you spring out of the lock? I never saw you when I landed.'

'I have been looking for your arrival these two hours,' said the other, shaking hands with him heartily, 'and to pass the time, have been fishing

off the weir! Welcome home, Tyndall! And especially do I give you joy upon another account. Hark! that is what our bells are saying also.'

Above the roar of the waters came plunging through the air the first notes of a merry peal from the church-tower, just visible above the more distant trees.

'In a few weeks more, I suppose, they will be ringing on a still more joyful occasion?'

'I suppose so—that is, I have every reason to hope they will,' returned Arthur. 'Have you been introduced to Miss Somers?'

'Yes; Adair did me that honour; then sent me back to call you. You paid no notice to his outcries, he said, but would doubtless hear the church. Our friend Jack is as funny as ever.'

'My ear is not so accustomed to the noise of the lasher as it used to be,' explained Arthur; 'I can scarcely hear myself speak here; so let us move on. How is your flock? I see by your looks that I need not inquire after the shepherd.'

The Rev. Charles Glyddon was certainly a healthy-looking man enough, though far from handsome. He was very tall and angular; had such high cheek-bones, that he seemed to look over them with difficulty, as a cow looks over a wall; and though a college contemporary of Arthur's, at whose recommendation his father had given him the living of Swansdale, had no air of youth about him. Notwithstanding his present pursuit, he wore full canonical attire; *videlicet*, a silk waistcoat without buttons—how he got into which, was a standing miracle to most of his congregation—and a white tie of great stiffness and altitude.

'The flock is well,' he said, 'and especially the lambs are flourishing, thanks to the good teaching of Miss Alice Renn'—

'What! does Jenny still teach?' asked Tyndall with a sudden interest, that contrasted strangely with his previous lukewarm manner.

'Certainly; though we have given up calling her Jenny. Our school could ill spare her services. She has fortunately plenty of leisure on her hands; for the old man seems to have made his fortune at the *Welcome*, where, however, she was sadly out of place.'

'Yes, indeed,' laughed Tyndall. 'Do you remember how old Jacob used to boast of her having had an offer of marriage from a lord? And so she had, I believe: a lord in the upper remove fifth form at Eton, aged fifteen years and a half. She used to be called the Toast-of-the-Thames.'

'I remember to have heard so,' said the rector gravely. 'It was a very painful position altogether.'

'What on earth has kept you all this time, Arthur!' exclaimed a chorus of female voices, for the two had now reached the barge.

'The church,' answered Arthur piously: 'I was listening to this reverend man. He wants subscriptions for the repair of the chancel.'

'Really, Tyndall, you are too bad,' said the rector reprovingly.

'I told him, from what I knew of Allardyce, that I was sure he was good for a painted window, and we have put down Paul Jones for a gargyle.'

'You have only to take a cast of his expressive countenance,' observed Allardyce.

'Or, if you want any brass ornaments, melt it,' suggested Tyndall.

'I owe you one for that,' muttered Mr Paul Jones between his teeth.

'Never mind, Paul; it's the first IOU he has ever got out of you,' whispered his cynical friend. — 'Come, Tyndall, confess what was the attraction at the cottage that kept you so long away?'

'I know,' said Jack coolly; 'but perhaps it would be hardly right to tell.'

Mr Glyddon, who had come on board the barge, now slowly poled upon its way, looked up sharply at the speaker. Arthur's eyes wandered nervously towards Helen. Had she caught sight of Jenny or not? he wondered. He did not doubt his friend's good-will or prudence; but perhaps it would be necessary for Jack to say something to which it must needs be embarrassing and painful for him to listen.

'Come, out with it!' said Allardyce coarsely. 'His father-confessor is here to give him absolution.'

The rector frowned, not because the observation was personally rude, though, considering the speaker was a stranger, it undoubtedly was so, but because he disliked jesting on such subjects.

'Well, as I remember Tyndall in our old river-days,' continued Adair, 'he never could pass that cottage without testing its famous tap of shandy-gaff—beer and ginger-beer, ladies, no worse.'

Helen's face was clouded.

She had seen Jenny, then, thought Arthur, and evidently resented this lame explanation of his conduct; she would now imagine that the girl had been always at the lock, and had formed its attraction for him, which would be making matters even worse than they were.

'I don't think "shandy-gaff" could have been quite a sufficient excuse for Arthur keeping us all waiting, Mr Adair,' observed Mrs Ralph Tyndall, in her gentle tones; 'but I should have thought very ill of him if he had not given a few minutes to his old friend and playfellow, Alice Renn.—Her father used to keep the *Welcome*, Helen, when Arthur was quite a boy, and though he left it for some years, the charms of the old place, it seems, proved too strong for him, for he came back some months ago, and took the lock cottage; though, to look at the old man, you would scarce have given him credit for such sentiment.'

'No, indeed,' said Helen, once more all smiles. 'And yet I do not wonder at any effect produced by the scenery of Swansdale. How grandly the gray church-tower stands out against the sky yonder! And, O Arthur! is that beautiful place the Hall?'

'Yes, dear, that is the Hall, or at least the roof of it.' He was really gratified that the place he could still call his own, in spite of waste and revel, awoke such evident admiration. 'The interior will want a good deal of what your good mother calls "setting to rights," and no doubt will therein afford you an opportunity of shewing your excellent good taste,' he whispered; 'but it is picturesque enough outside.'

Swansdale Hall was more than picturesque; it was a really noble mansion, and of great antiquity.

'Did you say the Hall was in sight?' asked Mrs Somers nervously. 'O dear me, yes; I see it now. Very pretty, I'm sure, though not quite so spacious as I had expected.'

'Nay, my dear madam, the Hall is hidden by the trees again just here,' explained Arthur, smiling. 'That is the cottage where Uncle Magus

lives, and this is his garden. One of his few pleasures is the cultivation of roses, and many a prize has he taken at the flower-shows for them.'

The shore was indeed here a bank of roses, the odour from which filled all the air. The cottage itself, with its carved porch and mullioned windows, was but a gymnasium for them whereon to climb, and cling, and hang, peering inquisitively, head downward, and with flushed faces, against the latticed panes, or struggling, by means of the quaint gables, to reach the roof. Beneath this fairy dwelling was a boat-house, the gates of which had been already opened, to admit the barge.

'Welcome to Swansdale!' exclaimed Tyndall graciously, as they glided in.

'Welcome home!' answered a grave clear voice.

On a wooden gallery which ran round the boat-house, and at the top of the steps that led down to the water, stood a gigantic figure, clothed in black velvet, and with a long white beard.

'Lawk-a-mercy!' ejaculated Mrs Somers, beneath her breath.

'Uncle Magus,' said Arthur, leaping out, and clasping the old man's hand, 'let me introduce you to my friends.'

As each of the company came up the steps, the old man saluted them in different fashion. To the rector he offered his whole hand; to Jack Adair he gave a couple of fingers; to Allardyce and Paul Jones, a stately inclination of the head; Mrs Ralph and Blanche he kissed upon the cheek; Helen he held at arm's length, regarding her attentively for some moments, and then pressed his lips to her brow.

'What will he do to me?' was the agonised thought of Mrs Somers, as she regarded these proceedings, for, for some, to her, inexplicable reason, she had been kept by Arthur to the last, as a *bonne bouche* for this ogre.

'I shall make you, madam, my peculiar care,' said the old gentleman gallantly, and lifting her gloved hand to his lips. 'The mother of Arthur's choice has a claim upon me, which my heart can never fail to acknowledge.'

'Most polite of your uncle, I'm sure,' observed the dowager to Arthur, as they followed the rest up a winding path towards the house. 'But I was really too frightened to answer him. Why does he dress like that—like a pen-wiper at a fancy fair—all black? When I come to know him a little better, I shall certainly give him a hint or two about that.'

'It is his fancy to wear velvet,' said Arthur gravely, 'and it is best not to interfere with it. As for the black, he is in mourning for his only son, though his death happened twenty years ago.'

'Poor Mr Maggot!'

'Not Maggot—Magus. He is very particular about his name, which he would not exchange for that of Guelph or Hapsburg.'

'Why should he?' answered the old lady. 'Of course nobody likes to be called out of their names, only, it's unfortunate he should have such a funny one. Does he always live here?'

'Always; and I hope will continue to do so.'

'Rent free, I daresay? Now, that's just like you, Arthur.'

'Hush! pray. We are all very fond of him, and it must never be supposed that he is under any obligation. I need not ask you to be kind to him; but if you ever feel inclined to smile at his

eccentricities, pray, for my sake, forbear to do so—that is, of course, in his presence.’

‘Lor, you needn’t be afraid of that. I’m frightened to death of him. The idea of his kissing my glove! It’s a mercy I had my four-and-nines, or the colour would have come out for certain.—Well, you *ave* got a fine ‘ouse—house, I mean—that’s my ‘uskiness again, through the situation being a little damp, I daresay, so near the river. You may build a couple of towers on to any place, and call it a Castle; or stick a few pillars in front of it, and call it a Belvedere; but this is something like a ‘All.’

THE MONTH: SCIENCE AND ARTS.

THE streak of cold in May is a phenomenon expected now by meteorologists as confidently as the November meteors are looked for by astronomers. Almost as far back as trustworthy observations extend, the interpolation of a touch of winter among the sunny days of May has been noticed, and it did not fail this year. It is an interesting fact, but as yet meteorologists are unable to give a reason for its occurrence.

Interesting also is the fact, that the mischief occasioned by the recent years of drought has been remedied: springs everywhere have resumed their flow; the withered and patchy pastures are green with abundance of grass, and those who foretold a cycle of dry years with consequent dearth are all proved to be false prophets.

For some months past, the Meteorological Office has published a daily weather-chart, and at two o’clock in the afternoon, most of the subscribers resident in London receive a copy, shewing what was the state of the weather at eight o’clock in the forenoon in Great Britain and Ireland, in Norway, and over a large part of France. It is obvious that many persons besides meteorologists are interested in knowing what weather prevailed over great part of Europe six hours ago, and the weather-chart tells them day after day of all changes of wind and weather, of rain and shine, and heat and cold, and whether the sea was rough or smooth. A tourist about to cross the Channel might lay aside his misgivings if he saw that the sea had been smooth or moderate at eight o’clock A.M. A similar record is shewn for the Irish Sea; and if any one is curious even about the Bay of Biscay, he can satisfy his curiosity with the daily weather-chart.

Holiday folk and invalids who like to sojourn by the sea-side often remark that our coast would be pleasanter than it is if there were more shelter afforded by trees than at present. Large districts, as is well known, are quite bare, even for a considerable distance inland; and the theory prevails, that trees are prevented from growing near the sea by strong winds. It has been suggested that this difficulty may be overcome by planting trees which thrive in similar circumstances in Japan—a notoriously windy country. The Japanese are skilful cultivators of woods and forests, and a selection from their trees would shelter and beautify many a bare slope and naked hollow along the coast of England.

Some naturalists have questioned the fact, that ants store up seeds or grain to be used as food,

and other naturalists have set themselves to observe, with a view to settle the question one way or the other. The last part of *Transactions of the Entomological Society* contains a few notes from an observer at Mentone, which support the popular view. He dug deep into the sandstone slopes till he came to the extremity of the ants’ nests, and there he found a chamber filled with grass seeds. He had seen the insects dragging the same sort of seeds outside; and to test further, he strewed millet and hemp-seed about the entrance, and these were carried in. At the end of a fortnight they were brought out again, the explanation being, that they had begun to germinate; and by watching, he saw that the ants gnawed off the radicle from each seed (which would prevent further growth), and then dragged them once more into their granary. The species of ant here concerned is that known to entomologists as the *Aphenogaster*. This statement of their habits seems to settle the question; but the same observer will extend his observations, so as to ascertain whether other species have the same habit.

A curious fact was mentioned at a recent meeting of the same Society—namely, that the galls seen on willow-trees do not grow on the branches which overhang the water, but on those only which overhang the land.

The United States’ government have sent out a scientific exploring expedition to cruise along the shores of South America and in the Pacific Ocean, with Agassiz, the eminent naturalist, to direct the scientific researches. The ship is probably now in the Strait of Magellan. The operations of the party will include deep-sea dredging, for it is believed that many species of animals, heretofore unknown, remain to be discovered, and that possibly living representatives may be met with of species which, as they are known only in a fossil state, have been regarded as extinct.

Our own government have undertaken to send out a ship for a three years’ voyage round the world, entirely in the interests of science, but chiefly in relation to zoology and natural history. Dredging operations will be carried on in every latitude, and at every possible depth, and careful observations will be made of ocean-currents. So much may be accomplished in three years, that we may hope, when the vessel returns, to find our knowledge of the physical geography and of the animal life of the sea largely extended. The Admiralty promise that the ship shall be ready next autumn; and when we mention that Professor Wyville Thomson, of Edinburgh, is to have charge of the scientific staff, readers may feel assured as to the success of this interesting expedition. Besides this, the government of India are supporting a project, set on foot by the Asiatic Society of Bengal, for deep-sea dredging in the Indian Ocean. Money has been allotted for the purpose, and the Royal Society, who are the scientific advisers for all the world, have been requested to select the requisite apparatus. Thus there will be three expeditions at work at the same time, and the life of the globe will be investigated and illustrated in a way never before equalled. It is almost alarming to contemplate the enormous additions that will thereby be made to museums of natural history in this country, in the United States, and in India.

In an article on Longevity, Professor Owen has

explained how it is that aged persons are said to have cut new teeth late in life. Many readers will remember to have heard or read of such occurrences, which are regarded as extraordinary. The facts are these: it often happens that teeth break or decay, and leave a stump in the gum. The gum closes over the place, and the incident is forgotten. As years go by, the jaw and the gums shrink; the long-buried stump is in consequence laid bare, and is hailed as a new tooth, and is sometimes mentioned in the newspapers as a kind of wonder. Thus a 'fact' is shewn by competent authority to be an error; and it is always well for public opinion to get rid of an error.

Americans often boast that their country beats all the rest of the world in natural aspects and phenomena, as well as in other particulars; and now they can point to a recently explored region, where such geysers, hot springs, and volcanoes abound as can be matched nowhere else. In the west of the great state of Missouri, the Yellowstone river waters a broad tract of country, and it is in this tract that the volcanic phenomena above referred to are situate. In one place a belt of hot springs stretches for three miles along the margin of a lake, forming cones and craters on a small scale. Elsewhere the boiling basins are fifty feet in diameter, and jets of steam are thrown up to a height of one hundred feet. Miles of country are, to quote the explorers' words, 'literally riddled with the orifices of active, quiet, dying and dead springs.' One large geyser was named 'Old Faithful,' from the steady diligence of its jets. Every hour it threw up a column of water six feet in diameter from one hundred to one hundred and sixty feet. When it is about to make a display, very little preliminary warning is given. There is simply a rush of steam for a moment, and then a column of water shoots up vertically into the air, and by a succession of impulses is apparently held steadily up for the space of fifteen minutes, after which the water falls back into the crater, and a brief rush of steam closes the operation. The column thrown up by another of these remarkable geysers, with an overpowering rush and roar, is two hundred feet high, and eight feet in diameter; and the silicious matter deposited round the openings of the jets, and on the margin of the springs, is described as singularly beautiful, with a resemblance to pearl and red coral. This wonderful region will no doubt attract visitors when the way thither shall be made easy. We hear that the United States' government are about to enact that a large portion thereof shall be set apart as a national park for ever, whereby we may hope that the rude natural features will be for ever preserved.

Glass-engraving and the shaping of stone by means of a jet of sand, of which we have given particulars in a former *Month*, has been tried with success at Paris. Any pattern on the glass may be produced at pleasure, or, if required, the whole surface may be ground or deadened. The cutting force of sand is such, under the influence of the blast, that it will pierce the hardest substances, even a steel file. A diamond loses weight if exposed to the jet for one minute; and in the same time a topaz entirely disappears. But to engrave glass, the pressure need not be great; and it is found in practice that glass may be engraved if the sand be driven by no greater power than the wind

from an ordinary blow-pipe. On the other hand, it is remarkable that little or no effect is produced by the full blast on soft substances, such as caoutchouc, paper, and the gelatine used in photography.

The most recent theory concerning the heat of the sun is, that it is caused by the shrinking of the sun's own mass; and some of our astronomers and physicists are discussing the question. Of course, a mass so enormous will give out an amount of heat enormous in proportion; but the shrinking goes on so slowly that many ages must elapse before any diminution in the amount of the sun's heat will become perceptible. In the last number of the *Monthly Notices* of the Royal Astronomical Society, calculations are given of the rate and quantity; and the author remarks, in conclusion, that the application of this theory to other bodies is almost without limit: 'the earth has contracted, and has stored up a corresponding amount of heat in the non-conducting rocks and soils; the stars, by their intrinsic brilliancy, indicate the operation of the force of gravity upon contracting matter; the nebulae afford examples of the commencement of this operation; and periodical variations in light now become perturbations; and all these phenomena are subject to the great principle known as the conservation of energy.'

The nebula in Argus has been observed recently in Tasmania, where it is always visible. The foregoing views acquire importance from the fact, that the light of this nebula has largely increased, while the whole form has changed its appearance. Grand changes are going on in those far remote regions of the sky.

By recent advices from Australia, we learn that the line of telegraph which is to cross that great country from north to south is nearly complete, and that the colonists look forward eagerly to the day when they shall send a message direct to England. The entire distance is seventeen hundred miles, and of this more than fourteen hundred miles are finished, so that intercommunication will not be much longer delayed. When we remember that the interior of Australia has always been regarded as a howling desert, this enterprise appears the more remarkable, and one of its immediate effects has been to make known the fact, that the interior is not a desert, but presents a vast expanse suitable for grazing and agriculture. There are, however, no great rivers, and the sea-board is distant, so the colonists propose to construct a narrow-gauge railway, at a cost of about three thousand pounds a mile, supplemented by grants of land, by the side of the telegraph, which shall be to settlers what rivers or the sea are to other places. What a field this will open for industry and enterprise! As an instance of the unconcern with which a journey through the interior is now regarded, we mention that the superintendent of the telegraph is to drive in an American buggy down the whole distance of seventeen hundred miles, to see that the line is in working order.

While new school-houses are being built, and old schools are incited to improve themselves up to the requirements of the day, Oxford, and Cambridge, and the London University are discussing an oft-mooted question—namely, as to whether modern languages shall be substituted for Latin and Greek in the course of study? Of course, there is much to be said on both sides of the

question; but there is a growing tendency to admit, that to most of the young men who pass through college, German would be far more useful than Greek, and would be as efficacious for purposes of intellectual discipline. The Chancellor of the Exchequer, who is the parliamentary representative of the London University, declares himself emphatically in favour of the change, so we may expect that it will be tried in London, if not in the elder universities.

SKUNKTOWN.

IN TWO PARTS.—PART II.

'I CALL that card well played, considering the scurry of the thing—pesky well played!' said the superintendent of Chicago police, after sitting for some time, with half-closed eyes and a suppressed smile of manifest enjoyment. 'You see, Mr Gresham, the young lady's arrival left him no choice but to slope, with empty hands or full ones, and he wasn't long in deciding which. Clear grit, that chap!'

And Mr Bunce—he wrote himself Enoch P. C. Bunce, and was a Kentuckian by birth—rubbed his big-knuckled hands on his bony knees, and chuckled audibly, as though a daring villain was to him as interesting an object as a cock-pheasant is to a sportsman. Finding, however, that I was quite incapable of sharing his professional raptures on the subject, the superintendent became sternly business-like. 'All things in order!' he said, jumping out of the hickory rocking-chair in which he had been slowly swaying himself to and fro, while listening to my story; 'and if you will excuse me, Mr Gresham, I'll take a few preliminary precautions.' So saying, he left the room, and I heard his voice in the outer office, apparently giving orders. Presently, he returned. 'I have sent some of my men to make the usual inquiries at the railway stations and the wharves,' he said; 'and I have sent word along the wires to arrest any individual answering to the description of the runaway. That's the A B C of police business, sir, but I'm afraid we shan't catch such an awful sly coon quite so easy.'

'You believe, then, that the fellow is an old offender?' asked I.

'Well, I do,' returned the official, thoughtfully tapping, with his heavy forefinger, on the ink-stained table before him. 'The States are a widish bit of ground, mister, but we of the police mostly know our own sheep—the black ones—and there are not many who are fit for so neat a job as this. Hiram Pell might have done it, but he's making mats in Sing-Sing prison. Lemoine is clever enough, but then there's no taking him for anything but a Frenchman. Harris got shot, last spring, New Mexico way. I can't lay finger, this minit, on three more names of old hands up to artifice of this superline sort. There was a man—a countryman of yours—but I heard he was lynched at Pike's Peak, which might not be true. A red-haired man, you say, Mr Gresham?'

'Not exactly,' I answered; 'his hair was reddish, certainly—what young ladies call auburn, and men speak of less politely, but not a true, fiery red.'

'Ah!' said the superintendent, in the weary tone of a cross-examining barrister who has failed to extract anything worth the learning from some

obtuse witness. 'We'll go now, sir, if you have no objection, round by the bank, and so to our friend's dwelling, Upper Avenue.'

And we went. At the bank, nothing was found, save only Fritz in a condition of wordy despair, smoking less and saying more than the excellent old Teuton had done for years; the safes and chests open; papers in wild confusion, and sundry bank-notes fluttering like dead leaves over the floor; while limp heavy packets of the same valuable 'promises to pay' were strewn over the tables of strong-room and parlour. I could not but admit that my companion was right when he declared that this determination on the part of our perfidious cashier, to carry off, as the thief's proverb goes, 'nothing too hot or too heavy for him,' marked the hardened criminal.

'A greenhorn,' observed Mr Bunce, 'would have taken every bill and note he could come by, leaving a fresh link in the chain of suspicion and detection at every town he sojourned in. This one has taken gold, and a pretty considerable pile, I reckon.'

And so it turned out, for a very cursory inspection shewed that the fugitive, who had been for some time busy in turning our more available bank-paper into gold, had carried away with him a large sum in hard cash.

Carthew's lodgings—I use the name still, in default of a more authentic one—presented, when we entered them, a still stranger scene of confusion than did the rifled penetralia of our usually well-ordered bank. All the drawers, trunks, and presses were open, and floor, tables, chairs, and hearth were alike littered with clothes, books, papers, and miscellaneous objects tossed about at random. The landlady knew nothing but what we had previously learned from the negro boy, Sam. Mr Carthew had rushed in, had spent some time in his rooms, had hurried out again, a small bag in his hand, and had dashed off at the fullest speed of a hack-carriage and an Irish driver excited by the promise of double fare and something to drink. He had changed his clothes, however; and the good woman was able to give us a pretty clear account of what he wore when he sallied forth, while the superintendent, who had been prying into every half-emptied cupboard or unlocked trunk, like a hound puzzling out a doubtful scent, suddenly pounced upon an oblong scrap of cardboard that had slipped from the upper drawer of a ransacked bureau, and lay among torn letters and worn-out pens in the compartment beneath.

'Jerusalem!' he exclaimed, with a long low whistle, more eloquent of surprise than words could have been; 'that's the varmint. It floated through my head more than once, though they did say he was strung up, at Pike's Peak, for horse-stealing. That's the individual, mister!'

The photograph, for such it was, represented a man's face, not ill-looking, so far as features went, but with a singular expression of reckless hardihood and vicious effrontery. The portrait purported to have been taken at Cleveland, Mariposa County, California; and the likeness to the false Robert Carthew, in spite of the different arrangement of the hair, was unquestionably great.

'That's Desperado Dick, that is,' remarked the head of the police, contemplating the portrait with somewhat of the pride of a showman exhibiting a peculiarly large and ferocious specimen of the great carnivora. 'And, let me tell you, Mr Gresham,

that you are in luck not to have been knifed, or pistolled, or hocused (for Dick is as ready with the little bottle as he is with bowie and six-shooter), as well as robbed. He's known over North America, that chap is, and he has need to have as many lives as a cat, seein' how often he has been wanted by Regulators' Courts and Vigilance Committees, let alone free fights and miscellaneous musses. He has broke prison more often, and been acquitted more often, than any one except Lemoine, and there are warrants against him from Maine to Texas. He hails from the old country, and must have had a decent bringing-up; but he's flint-hard and bad to the core.'

'What was the name you called him by—and what is his real one?' I asked, with a quick flutter at my heart, as for the first time it struck me that some mystery overhung the fate of Julia's brother, and that, by some means, unexplained, the treacherous cashier had contrived to suppress, as well as to personate him. What I had heard of the evil repute and unscrupulous character of my late comrade, led me to augur somewhat ill of poor Robert Carthew's safety.

The superintendent seemed to read my thoughts, for he considerably rejoined: 'No, sir, you need not—to my mind—suppose that Dick has murdered your friend as well as stepped into his shoes. That would have been a bungling way of untying the knot, and caused a newspaper outcry—the very thing to be avoided. Some devilry, no doubt, the rascal has been up to, but, five to two, not what you think. To have made away with you, Mr Gresham, would have been better policy, since you are the person Harvey has most cause to fear.'

'Harvey? Is that the name?' inquired I.

The superintendent nodded. 'The critter has twenty names,' he said; 'but they do tell that that one of Richard Harvey is the one he has by rights. Mostly, we say Desperado Dick, and sometimes Harvey. Come, let us hunt a little more on the chance of something turning up, and then go back to the office and wait for news.'

Our search, for some time fruitless, was at length rewarded by the discovery of two old envelopes, one addressed to the initials R. H. Post-office, New York, and the other to Richard Harvey, Esq. Falls Hotel, Niagara, a result which fully confirmed the confident assertion of my mentor. Probably the runaway had hastily burned many compromising documents, for the embers of the wood-fire on the hearth were yet warm, and many scorched fragments of paper were found among the ashes, none of which, however, were legible. We found a pouch half-full of central-fire cartridges, but no arms, a circumstance on which Mr Bunce commented with a grim smile: 'Wild-cats don't mostly leave their claws and teeth behind them, I guess. Dick will run while he can; but if he sees his way to fight through it, fight he will, mister.'

I was not to be deterred, however, from personally conducting the pursuit, by any apprehensions of the lawless violence of my late perfidious associate. Not only was I highly incensed against the man who had duped and derided me, and through whose agency Julia's brother had disappeared, but I felt that it was my plain duty to my employers to spare no risk or exertion in recovering their property. The false cashier had carried off a sum in gold which it would have taken far more than all my savings to make good to the Anglo-American

Bank. Legally and technically, perhaps, I was not responsible, but I acknowledged to myself the moral obligation to indemnify my principals for the severe loss which, through my credulity and laxity, they had sustained. For, clearly, had I not been in love with Julia, I should have viewed the man who pretended to be her brother with very different and less indulgent eyes, nor should I, in the first instance, have used my influence to secure the appointment for even the real Robert. My mind was therefore made up, at whatsoever loss to myself, to repay by instalments every farthing to the Company, unless, indeed, I could overtake the robber and rescue the booty.

It was now very late; and as no train would leave Chicago until early morning, it was agreed that I should meet the superintendent on Story's Wharf, shortly after daybreak, so that no time might be lost in following up the traces of the fugitive, of whose movements, subsequent to his leaving the city, some intelligence might presently be hoped for. The remainder of that wretched night I passed as best I could. Sleep was impossible, and restlessly I wandered about the house, going from room to room like the phantom of some old ghostly legend, and eagerly comparing my watch with the clock of the neighbouring Catholic church, whenever the deep resonant clang that told of the death of another hour reached my anxious ears. By the time the dawn came, I was ready to sally forth, and I had waited for some time on Story's Wharf before Superintendent Bunce, followed by two of his men, in plain clothes, joined me.

'You look pale, mister,' said the experienced head of the police. 'Don't you think, now, you would do better to stop quiet, and leave the job to us. We may have a smartish run of it yet—for all that it seems such plain sailing—and you are ill and harassed, to judge by head-mark.'

'Never mind me!' I answered impatiently: 'I am resolved to stick to this fellow, if the chase lead us across half the continent. What news, Mr Bunce, since I gather from your words that you have picked up some intelligence?'

The superintendent's tidings were briefly as follows: A person answering to the description of the runaway had, in consequence of the instructions forwarded by telegraph, been arrested at Detroit. The message sent by the local police made no mention of valuables found on the prisoner's person, and added no detail to the simple statement of the caption, save only that the suspected individual wore 'a red wig.' It was requested, moreover, that some one who could identify the supposed criminal should immediately be despatched to the place of his detention.

'Now, at first blink of the thing,' said Mr Superintendent, shaking his sagacious head in a manner that would have done credit to Lord Burleigh's self, 'our work seems cut out for us. The critter's caged, and we have but to bring him back to the city and lodge him in jail. Too smooth to be true, I reckon.'

'You mean,' said I, 'that the success is too quickly and easily obtained, as I understand you, to be complete.'

'That's about it,' rejoined the policeman-in-chief discontentedly: 'a terrapin or a tortoise any boy can catch, but I never did know a snapping-turtle carried home in a school-satchel yet.'

Desperado Dick must have altered a few, he must, if he ran into a trap that way, as a prairie turkey walks into a log-pen baited with corn-cobs.'

'Tain't like him! not one scrap!' sententially observed the taller of Mr Bunce's satellites, a gaunt, sinewy man of middle age, with a face tanned by the sun. This latter, who was now introduced to me by the name, or rather sobriquet, of Western Jem, had been successively hunter, trapper, guide, gold-digger, and policeman. His practical acquaintance with backwoods life, and the shifts and stratagems of the wilderness, made him valuable to his official superiors, while his strength and courage, tested in many an encounter with bears and Indians, earned him the respect of his better-educated comrades. The other policeman was a New-Englander, slight made, pale, and intelligent. His name was Hucks; and he afterwards told me, somewhat vain-gloriously, that he was a graduate of Harvard College, and had been a newspaper reporter, an 'assistant physician,' a sub-collector of customs, and the contributor of many poetical effusions to the *Boston Illuminator*, before destiny impelled him to accept a constable's truncheon, or, as he worded it, a marshalship, in the Chicago police.

It was, at all events, necessary that we should forthwith set off for Detroit, to make sure of the identity of the arrested person with our absconding cashier; but, as there was yet a little time before the early train should start, I hurried off to have a brief interview with Julia at the hospitable mansion of the friends to whose care I had, on the previous night, so summarily consigned her. Summoned by a young negress whom I had found in the act of polishing, with an air of great importance, the brass fittings of her master's mahogany street-door, and whose white teeth glistened with good-natured wonder at my matutinal errand, the dear girl came promptly down to speak to me. Her pale, pretty face and tear-stained eyes told that she, too, had passed the night with but little sleep. She eagerly assured me, however, that it was not her own solitary position—among strangers in a strange country—that had broken her slumbers. The Grays—few names were more respected in Chicago than that of Enoch Gray—were, she declared, the kindest and best of hosts, and their welcome of her had been so simply frank and genial that she felt herself instantly at home with them. But the shock of the discovery of the imposture, the annoyance and probable loss that I had sustained, with the uncertainty as to the fate of her dearly loved brother, had combined to banish sleep, and she was anxious and uneasy.

'Do you think, John, dear,' she said, in a low voice and hesitatingly, as if dreading the answer, 'that he has done any—serious harm—to poor Robert?'

I answered, as confidently as I could, in the negative, fortifying my opinion by the more competent judgment of Superintendent Bunce, and even ventured to aver that, the traitor once in safe custody, there would be little difficulty in extracting from him such information as would enable us to trace out young Carthew, wherever he might be. As the train sped on, however, the remembrance of Julia's sad eyes haunted me, and I could not but feel considerable misgivings as to the fate of young Robert. 'Dead men,' so the pirates' proverb runs, 'tell no tales;' and one crime the more could but slightly affect the seared and hardened con-

science of Desperado Dick, if it seemed the readiest method of securing immunity from detection. It was only too likely that Robert Carthew was lying in an unblest grave by land or sea, and that Harvey had not scrupled to remove from his path a troublesome witness.

We reached Detroit in due course of time; but there a disappointment awaited us. The captive in the red wig turned out to be, not Richard Harvey, but a noisy, whisky-drinking Irishman, who vehemently demanded his liberty, and as obstinately proclaimed his name to be Dan Mahoney, 'onst' of County Clare, but now of America generally. This clamorous Milesian had been, so the Detroit police assured us, in a far more advanced and incoherent state of intoxication when just arrested, and even now it was very difficult to draw from him an intelligible answer. He wore, however, according to the description supplied by the landlady of the fictitious Robert Carthew, the identical clothes in which our absconding cashier had made his final exit from Chicago; while in his pockets were letters and memoranda obviously belonging to the defaulter, and, to cap all, the red wig was undoubtedly the same which had long passed muster among us as the genuine capillary growth of Julia's brother. The man himself was an unpromising subject from whom to extract information. His whisky-soddened brain—for his intemperance was evidently habitual—was proof against argument and remonstrance, and beyond wild assertions that the Mahoneys were an old stock, that America was a land of freedom, and that he, Dan, would soon apply a shillelagh to the skulls of the 'dhurty police' to whom he owed his detention, little or nothing could be drawn from him.

'I should have given up this Hibernian Trinculo in despair; but the superintendent, more familiar with the foibles of this interesting class of Irish immigrant, took the patient in hand, and, by dint of patience, flattery, and mint-juleps, wormed out of him whatever information mortal ingenuity could extract. Mr Bunce looked very serious when he came back to us.

'Now, Mr Gresham,' said he, 'this, I calculate, is like a game of chess with half one's pawns lost, and the moves muddled. We've given Dick time, and if he has used it as so spry a chap had oughter, we mout as well try to run down an elk on foot. But nobody's perfect, and he may have thrown away a chance as well as we. Here is what I have pumped out of the drunken Paddy yonder. This fellow Dan had been at a Fenian lodge at Marshall, on the line we've travelled. There he met Desperado Dick, who saw his condition, treated him to liquor, and paid him fifty dollars to exchange clothes with him, saying that the barter was for a wager. That is all he knows. What we have to do is to get back to Marshall as fast as the cars will take us.'

Arrived at the small township of Marshall, and having in vain made inquiry among the porters and hangers-on, white and black, of the station as to the proceedings of the fugitive, we stood for a while perplexed, when, to my delight, I caught sight of a sun-browned face that I well knew, that of the old farmer who had once told me of his floating recollections connected with the features of the false Robert Carthew.

'Dick Harvey, be he?' exclaimed the old man

with a west-country whoop of exultation. 'Then, squire, you may say to your dying day my memory's none so bad for my years, nor yet my eyesight, I guess. Reckon I saw the critter, an hour since, in his own black hair and a suit of coarse blanket-cloth, such as bricklaying Irishers wear, start by the cars for Katamayoo.'

'Only an hour ago! Why, it was late last night that the exchange of clothes was effected!' said I wonderingly.

But the old farmer chuckled. 'You know our country pretty well for a Britisher, Mr Gresham, but you don't know it quite. The bridge over Blue Clay Gully has wanted repairs a long while, but the secretary of this railway wouldn't present the repairs till he'd netted his premium on the dividends. Last night there was a tidy smash—no life lost, but work for the bone-setters—and fifty fine oxen, besides hogs, smothered in the Gully mud. They turned out a gang at four dollars and what they chose to drink, by lantern-light, felled the trees, sawed the planks, threw over a sort of bridge, and set the line to work, they did. That's why Dick war delayed; but he's at Katamayoo now, for I hearn him book for it.'

This news electrified us. Western Jem smiled grimly, and thrust his bony hand into the bosom of his frayed and tarnished waistcoat of black silk, feeling for the buckhorn haft of his inseparable bowie-knife. The literary policeman was radiant; while, to judge by the expressive countenance of Superintendent Bunce, he might have been engaged in closing the steel handcuffs on the wrists of the runaway with a sharp and satisfactory snap.

'But how are we to get there in time?'

It was I who put the question, and nobody could answer it. Katamayoo, by American measurement, was not far off, perhaps some twenty miles distant, or, it might be, a league or so more, from our base of operations. But no train would come up for ninety-seven minutes, and to give that amount of law, added to the start he already possessed, to Desperado Dick would be fatal to the success of our enterprise.

'No use telegraphing,' said the superintendent ruefully. 'There's no squire, nor yet no lawyer, to Katamayoo township, and if there is a county constable, most like he is some doddering dotard on crutches, not fit to hev a rough-and-tumble with Dick Harvey. If we could get there ourselves—'

'We can,' said the Boston man, whose quick eyes had been busy in every nook and corner—'we can, Mr Bunce, if you and Mr Gresham air willing to risk a few. Under the shed to the left is an old locomotive, rusted and broke down, but not badly hit. Now, I'm a bit of an engine-smith, and if somebody would loan me a hammer and drill, and you gentlemen would stoke up logs and tote the water, we'd be off, greased-lightning fashion, up line.'

The former contributor to the Boston press was as good as his word—nay, better, for he approved himself so skillful in handling such rude tools as we could procure for him in the overgrown village, that, seconded by our hearty efforts as regarded water and fuel, the creaking, crazy old engine was ere long under weigh, and we started for Katamayoo at a jumbling, staggering trot, such as that which a worn-out but well-bred cab horse can occasionally perform under pressure of whipcord. We reached

Katamayoo a full half hour before the normal train could possibly arrive there.

'Chap in coarse blanketing, black hair, neck-or-nothing look, arrived here from Marshall by last cars. What's come of the critter?' inquired Mr Bunce of the station-master, whom he knew.

What the station-master, who was a little, meagre, inquisitive old man, with a green shade over his eyes, knew regarding the fugitive was quickly ascertained. Among several travellers in blanket suits, more or less labour-stained, one active, dark-haired passenger had attracted more notice than the others. He had asked questions, thereby proving himself to be a stranger to the district. He had expressed, firstly, a desire to hire a horse and gig; and on hearing that no vehicle was to be had on hire at that sequestered spot, he had purchased a horse, with saddle and bridle, at Bryant's farm, and had set off, at a round pace, on the road to Corunna, to which place he had somewhat ostentatiously inquired the distance before starting.

'That's a blind,' said Superintendent Bunce scornfully—'a mere cave-in. Corunna, forsooth! I wish I may be branded mean, if Dick's point isn't Grandhaven, yonder, beside the lake, among the woods. Onst there, he could take boat across, and make tracks for St Louis and California. Push on, and we'll hev him yet.'

So, by dint of private influence and liberal payment, we hired a wagon drawn by two powerful horses, and with a spare saddle-horse in tow, off we struck into the forest-road in pursuit of the fugitive.

It is a wild country that fills up the peninsula between Lakes Huron and Erie to the east and south, and the far-stretching waters of Lake Michigan to the west. The black pine-forest, intersected by sluggish streams, near which grew ash and alder, willow and mimosa, rolled away before us for leagues untold. The clearings were few, and the population scanty, and it was but seldom that we encountered a human being, or saw any trace of man or his works, save only the rough road and the rude bridges of unheewn timber that spanned the creeks. At last, we came to a point where the route formed a fork, and where, on a 'blazed' tree, the bark of which had been slashed away by the axe, were painted on the gleaming white wood two ill-executed arrows, beneath one of which was written, 'To Corunna;' while beneath the other was inscribed, 'To Grandhaven,' in characters almost obliterated by time and weather. The superintendent hesitated for a few moments, and then ordered our driver, a taciturn country lad, to take the latter route. On we plunged into the pine-forest, the sandy road growing rougher, and the swamps more frequent, until at length we espied a long, low, straggling building, roofed with bark, which stood by the road-side. This was plainly one of those 'shebeens,' or taverns of the humblest pretensions, so common in the sparsely settled West, and which are in most cases kept by Irish immigrants. This was one of the poorest of its class, and we should have passed it with little heed, had it not been that a saddled horse stood before the clumsy door, his bridle fastened to a stake.

'We have him! Look to your arms, boys,' cried the superintendent breathlessly. But the object of our pursuit had quick ears, and had

no doubt distinguished the sound of wheels, for before we reached the house there darted from it the lithe, active figure of the man we sought. He was clad, as we had anticipated, in a suit of coarse and clay-stained blanketing, and his dark hair was now undisguisedly exhibited; but I knew him at once—the false Robert Carthew, the real Richard Harvey. With a dexterous jerk, he detached the bridle from the stake to which it hung, but the half-broken young horse swerved and reared as he tried to mount, and for a moment it seemed as if capture were certain. He drew his revolver, while his pale, stern face grew paler. White and desperate, it flashed defiance on us as we approached.

'Curse you!' he hissed out savagely, between his clenched teeth. 'Take that, and that, and that!' And as he spoke he fired three shots, the first of which crippled the left wrist of the Boston detective, the second drilled a round hole in Mr Bunce's stiff hat, and the third grazed me so closely, that I felt as if a hot iron had been drawn across my right cheek, from the lip to the ear. I bear the mark to this day.

Crack, crack, the repeating pistols of the policemen answered the fire of our enemy, but fruitlessly, for with a laugh of contempt the object of their aim swung himself into the saddle, and went dashing down the road, discharging as he went the remaining chambers of his pistol, but this time without effect. The Kentucky blood of the superintendent was now fairly up.

'Ye pesky scoundrel!' he cried aloud, shaking his fist at the flying horseman, 'we'll hev your scalp yet. Up with you, Jem, and give chase; and you, boy, if you'd keep whole bones in your skin, larrup the nags, and go like steam!'

On sped the fierce pursuit, the ex-hunter, as the best rider of the party, being mounted on the spare horse, and galloping far ahead, although our pace was a rapid one, when, ere long, Western Jem came spurting back, his sunburned face paler than before.

'The cuss has done it. Dick Harvey is the devil's own child, I reckon. Anyhow, he has done it, and we are dead men.'

'What has he done?' asked the superintendent.

Already the pungent smell of scorched weeds and green wood burning told its tale, and a low dull roar broke sullenly upon our ears.

'Fired the woods!' gasped out Western Jem. 'That's what he's done, and what he'll hev to answer for one day before the Almighty. But we must run for it, misters. Wind's from the north. Our only point is the lake.'

No fancied horrors of the direst nightmare could easily have outdone the actual horrors of that frenzied rush for life—life and immunity from a death of agony, which then seemed to condense into a few miserable minutes the anxieties of a lifetime. As we swept on at fullest speed, the fire followed us, coming relentlessly down with a deep hoarse roar, like that of a wild beast impatient to be fed, and greedy for prey. We heard the fall of burning trees, we felt the scorching breath of the coming flames, hot as the blast from a furnace-mouth, while anon the smoke rolled past in eddying volumes, mixed with a thousand fiery sparks, and for the time hid from us alike the road we travelled, and the blue sky overhead. The heated atmosphere was suffocating; and we had to draw our breath painfully, as, lashing and goading the

frightened horses to renewed exertions, on we flew straining every nerve to keep ahead of the fire.

Deeper and deeper, louder and nearer, and nearer yet, came on that awful roar of the billowy conflagration, fed by the dried trunks of ten thousand forest trees, and growing like a baleful prodigy into portentous proportions as it rushed on, pressing on our heels, and sending before it the hollow sound that heralded its menacing approach. We saw the withered grasses by the road-side, the parched mosses on the trees, the yellowed reeds of the brake, dry as tinder with the long summer's heat, take fire as if spontaneously, and send long snaky tongues of flame wreathing along before us, as if to cut off our retreat. Showers of blazing twigs and red-hot flakes of burning bark went whirling down the hot wind, and were blown upon us as we fled, while the hoarse and gathering roar of the approaching fire seemed to mock our feeble efforts to escape. The horses that drew the light wagon, as fully alive to the coming danger as ourselves, strained every muscle and sinew in the arduous struggle to keep ahead of the fiery flood that rolled on behind us, and the cart absolutely bounded as we flew at mad speed along the ill-constructed road. The slightest accident to wheel or axle-tree, the snapping of a trace, the breaking of a strap or buckle, would have been our death-warrant. As it was, twice we saw the flames crawl past us and ignite the brushwood on both sides of the road, and twice we were forced to charge through the smoke and blaze of burning pea-vines and dead branches, before the more solid saplings had had time to take fire, but, choked and dizzy with the smoke, on we went; and as our steeds began to flag, a wild whoop of triumph from our mounted guide renewed our hopes. 'The lake—two minits, boys, and we've whipped. Yonder shines old Michigan.' And, true enough, the bright waters began to become visible, gleaming through the dusky glades of the pine-woods.

It was not the broad expanse, however, of Lake Michigan which met our eyes as we emerged from the wood. We were on the shores of a creek, wide and deep, which indented the shore, and at the western extremity of which the seemingly boundless sheet of the inland sea was dimly visible. In any case, however, the means of safety lay before us, and, by a common impulse, men and animals rushed down the bank, and waded into the water of the shallows, until it reached nearly to our necks. Then we turned instinctively to look back at the horror behind us. Down it came, hard at our heels, a very deluge of fire, rolling along the ground, scaling the highest tree-tops, devouring all that lay in its cruel path, and rushing forward like an angry giant, robed in lurid light—red, yellow, violet—while the flames licked greedily at the very water that was our refuge, and showers of sparks and burning bark fell in fiery rain around us, and the waves of the creek became blood-red in the glare of the forest-fire. For hours we were compelled to remain thus, half-suffocated by the volleying smoke, and gasping in the oven-like heat, until at length, little by little, the danger passed away, and left no traces but those of thousands of acres of charred fragments of trees and a blackened soil. Then we emerged from the water, and, on a smooth sand-bank at the edge of the creek, established our camp for the night.

In this improvised bivouac of ours, comfortless

as it was, since, with the exception of a couple of flat loaves of corn-bread and a flask of whisky, we were destitute of provisions, I was surprised to hear Western Jem chuckle to himself, not once, but repeatedly, with a secret sense of satisfaction only comparable to that of a magpie that has triumphantly succeeded in concealing stolen property.

'What amuses me, mister?' said the ex-hunter in answer to my somewhat peevish inquiry. 'What does that signify, 'cept to this nigger?' And then, as if the joke were too admirable a one to be lost, he added: 'Dick fired the bush to blind his trail, he did, and to make the bush too hot to hold us. Then he set spurs to his nag, and made for Leaping Buck's Pool, a place every woodsman of these parts knows; and Dick Harvey larned of it, I guess, when he broke prison at North Buffalo, and lay hid eight months in the forests. But he was out in his calculation that time, and didn't make allowance for the wind—let alone knowing what a forest-fire is, as this child knows it. I'd bet ten beaver-skins, squire, to the meanest pelure ye like, mink or squirrel, that Desperado Dick has been caught in his own trap.'

And so it proved; for when, under the guidance of the hunter-policeman, we reached the little oasis in the forest where the runaway had sought shelter, and where the Pool of the Leaping Buck, with its crystal-clear fountain and girdle of swampy soil lay belted in by blackened trees and charred vegetation, we found the unhappy man lying dead among the moss-grown rocks that bordered the pure water of the spring. The moist soil, and the many small rills that intersected the marshy clearing, combined with the absence of dry timber, had indeed checked the actual progress of the conflagration, and, unburned, a patch of wet ground lay exempt from the general ruin. But the fugitive had not reckoned on the effects of the fierce furnace-heat that had withered the very wild-flowers that grew in the spray of the trickling fountain, nor on the blinding and suffocating smoke, which had probably served to shorten his sufferings. He was lying among the stones, as if asleep, with his head pillowed on one arm, nor was there any expression of pain or of alarm on his haggard, handsome face, now fixed for ever. The belt which he wore beneath his clothes, and which was heavy with gold, contained the whole sum with which he had absconded.

At Chicago a new surprise awaited me, for, on entering the house of the friend to whose hospitable care Julia had been consigned, I was confronted by, this time, no counterfeit presentment of Robert Carthew, but Julia's brother in genuine flesh and blood. His sallow complexion and hollow cheeks told of hardships lately endured; but he seemed, what I had always expected him to prove, a thoroughly good fellow, and we shook hands and fraternised with sincere pleasure. Robert's story was simply this: He had, in landing in America, fallen in, at a waterside hotel, with a stranger of fluent speech and winning manners, who had, without apparent effort, extracted from the unsuspecting lad full information as to the nature of the business that had brought him across the Atlantic, and the situation that awaited him at Chicago. It was easy to guess that Desperado Dick had soon formed the bold project of substituting himself for our cashier elect, and his first care was necessarily to get his dupe out of the way. With this view, on leaving

the theatre, on the day following that of young Carthew's disembarkation, he had contrived to inveigle his victim into one of those dens where illicit gambling, crimping of sailors, and mad orgies of drunkenness go hand in hand, and where nothing that occurred remained present to Robert's memory save that he drank a glass of some unknown liquor, lost his consciousness, and, when he regained his senses, found himself in the wet fore-castle of an American whale-ship, beating out to sea, and was informed, in answer to his remonstrances, that he had 'shipped as a landsman,' and must hold to his bargain, and do his duty for three years, under the gentle persuasion of rope's-end, marline-spike, and knuckle-duster.

Poor Carthew received thereupon the fare and wages of a common seaman until such time as the good ship *Flying-fish* luckily sprung a leak, and put into harbour at San Francisco, where he was fortunately able to desert and claim the protection of the British consul, by whose assistance he had at length reached Chicago, in time to fill his post of cashier, and to give away his sister on the occasion of her wedding. This happy event took place two months later; and when, after a few years, we finally left America for England, Robert deservedly succeeded to my place as manager.

LOOKING BACK.

I LEAN on the rectory gates again,
As oft I've leant in the days of old,
When the rector's daughter, Miriam Mayne,
Was aye a treasure to me untold;
And straight I muse on that olden time,
In the fading light of the autumn day,
As the dreamy tones of the curfew's chime
Float over the shadowy woods away.

The cushat calls, as of old, from fields
That fill with mist as the daylight fades,
And the dim, mysterious twilight steals
O'er hill and dale with her dreamy shades;
And the pale, proud moon, with her wan lip curled,
Who asks no aid of sail or of oar,
Swims up the east from the under-world,
As she swam in the autumn eves of yore.

But there comes not now, as then there came,
Up the gravelled pathway unto me,
A maid it was, oh, so sweet to name!
A form it was, oh, such bliss to see!
And, standing here by the gates, I miss
The silvery ring of her every tone,
The smile and the look, the greeting kiss,
And the soft white hand within mine own.

Nor ever again, at the twilight hour,
When stars steal out in the heavens above,
And dew hangs light upon leaf and flower,
Oh, never again shall I meet my love!
For one May morn, as the eastern skies
Were flushing faint with the dawn, she died;
And cold, cold now in her grave she lies,
By yon gray church on the bare hill-side.

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